



Program Highlights

Benefits/Cost Savings

- \$9,020 cost savings (from salvage and recycling)
- 82% recycling/salvage rate
- 45 tons salvaged
- 196 tons recycled

Material Salvaged Included:

- 18 tons of dimensional lumber
- 1 ton of siding and trim
- Plumbing fixtures
- Lighting fixtures
- Cabinetry, shelving systems
- Stairwell

Materials Recycled

- 170 tons of concrete and masonry
- 19 tons of wood
- 7 tons of metal

Project Statistics

- Size: 5,300 sq. ft.
- Location: Mercer Island, WA

Deconstruction Contractor

Earthwise, Inc.
707 South Lander
Seattle, WA 98134
(206) 624-4510



Hand demolition enabled over three-quarters of this Mercer Island residence to be either salvaged or recycled.

Difficult Logistics Lead to an Environmental Solution

When conventional, mechanical demolition is considered the most efficient way to remove a structure, how can you justify taking a different approach and demolishing a house by hand? Will the sale of salvaged items and money saved through recycling make up for extra labor costs involved in hand demolition? Is being environmentally minded worth the risk?

For the demolition of a two-story Mercer Island house, the answer from both the owner and the contractor was a resounding YES!

Unconventional Approach Wins the Day (and the Bid!)

The owners wanted a home of an entirely different design. The existing house, built in the 1940's with colonial pillars and big bay windows was demolished to make way for the new one. A major problem with the site was access. Built on a hill with a steep driveway, access to the site was thought too small for the large trucks needed for conventional, mechanical demolition. The owner decided to seek out alternatives. That's where Kurt Petrauskas and his company Earthwise Demolition came in.

The salvaging and recycling techniques Earthwise uses means a house comes apart in smaller pieces than in a conventional demolition. Smaller

"There were many quality items in this house that would have been destroyed using conventional demolition. We salvaged several things that just aren't made anymore."

— Kurt Petrauskas,
Owner, Earthwise, Inc.

trucks can be used making transportation more economical. When Earthwise Demolition's bid for the project came in \$7,000 less than conventional demolition proposals, the owners were quite happy to try the alternative approach to removing the structure.

Salvaging Treasures

Before the first brick was ever disturbed, seekers of salvaged building materials were invited to look over the house for treasures. When searching for pieces for their own home remodels, Earthwise advises customers to buy unique pieces first and build them into the overall design. One buyer bought the entire library shelving and paneling and duplicated the room in his own house. Made from honey-brown exotic hardwood, the paneled construction with crown detailing, wainscoting, and a box beam ceiling would be very difficult and expensive to duplicate today. Other purchases included the entire stairwell, all six sets of French doors, a deep green marble mantle, and the painted wood siding and trim. Pre-selling avoids extra transportation and storage costs during the actual deconstruction process.

Salvage First!

Although recycling is an excellent alternative to landfilling, salvaging items for reuse in their original state is even better. Earthwise salvaged over half of the house, including: all the doors, windows, and cabinets; most of the plumbing fixtures; most of the dimensional lumber; lighting fixtures; and the siding and trim. Reuse of these items in other homes means no new resources are used.

Next, Recycle!

Sometimes materials can not be effectively salvaged, so recycling becomes the next best alternative. The oak strip flooring had too many nails to be salvaged. Instead, the floor was recycled along with the roof framing and its two layers of cedar shakes. All the wiring and the heating system ductwork were recycled, resulting in over \$700 in savings from avoided landfill fees and premiums paid for the scrap metal. The concrete foundation walls were demolished on-site and removed for recycling. The brick chimney stacks were also recycled.

A Light Touch, A Job Well Done

After four weeks of work it was as if the house had been magically removed, leaving the shrubs and landscaping untouched (another benefit of hand demolition— prevents waste of existing landscape elements)! Over three-quarters of the house was either salvaged or recycled. Approximately 240 tons of material was kept out of the landfill. Finally, a savings of almost \$9,000 was achieved.

**Call the King County Solid Waste Division
(206) 296-8480 for assistance.**

For more information:

King County

*King County Construction
Recycling Directory*
Theresa Koppang
*King County
Solid Waste Division*
(206) 296-8480
1-800-833-6388 (TTY Relay)

City of Seattle

*Business and Industry
Recycling Venture*
(206) 389-7304

Demolition Contractor

Kurt Petrauskas
Earthwise, Inc.
(206) 624-4510

Case Study Consultants

O'Brien & Company
(206) 842-8995

This material will be
provided in alternate
formats upon request.

**CONSTRUCTION
RECYCLING
WORKS**
It's Good Business